

IN THE CLAIMS:

Please cancel Claims 3, 19, and 22 and amend Claims 1, 17 and 20 as follows:

1. (Currently Amended) An image forming apparatus for outputting an image based on inputted image data, said apparatus comprising:

reading means for reading an image and generating image data;

creation means for creating a correction table for correcting the density characteristics of the image data;

correction means for correcting the density characteristics of the image data from said reading means, based on the correction table created by said creation means; and

output means for outputting an image based on the image data corrected by said correction means;

wherein said creation means ~~creates the correction table based on~~ determines a train of density data ~~generated based on an average value of plural brightness data obtained by~~ said reading means by reading plural gradient patterns ~~outputted by said output means, and~~ applies a smoothing process to the train of density data, thereby to create the correction table, and the plural gradient patterns ~~outputted by said output means~~ are disposed in point symmetry with respect to a center position of the image,

wherein the correction table for correcting the image data read by said reading means is created by performing ~~a~~ the smoothing process using some pieces of data whose number changes depending on the position of data in the ~~generated~~ determined train of density data, and

wherein the number of pieces of data used in the smoothing process is ~~selected~~
set on the basis of density reproduction characteristics of said image forming apparatus.

2. (Previously Presented) The image forming apparatus according to
Claim 1, wherein the gradient pattern is composed of a plurality of density patches.

3. - 16. (Cancelled)

17. (Currently Amended) An image forming method for outputting an
image based on inputted image data, said method comprising the steps of:

reading an image and generating image data;

creating a correction table for correcting the density characteristics of the
image data;

correcting the density characteristics of the image data from said reading step,
based on the correction table created in said creating step; and

outputting an image based on the image data corrected in said correcting step,

wherein[[,]] [[in]] said creating step, ~~the correction table is created based on~~
determines a train of density data generated based on an average value of plural brightness data
obtained in said reading step by reading plural gradient patterns, ~~outputted in said outputting step~~
and applies a smoothing process to the train of density data, thereby to create the correction table,
and the plural gradient patterns outputted in said outputting step are disposed in point symmetry
with respect to a center position of the image,

wherein the correction table is created by performing a the smoothing process using some pieces of data whose number changes depending on the position of data in the ~~generated~~ determined train of density data, and

wherein the number of pieces of data used in the smoothing process is ~~selected~~ set on the basis of density reproduction characteristics.

18. (Previously Presented) The image forming method according to Claim 17, wherein the gradient pattern is composed of a plurality of density patches.

19. (Cancelled)

20. (Currently Amended) A computer program which causes a computer to execute the steps of:

reading an image and generating image data;

creating a correction table for correcting the density characteristics of the image data;

correcting the density characteristics of the image data from said reading step, based on the correction table created by said creating step; and

outputting an image based on the image data corrected by said correcting step,

wherein~~[[,]] [[in]]~~ said creating step, ~~the correction table is created based on~~ determines a train of density data generated based on an average value of plural brightness data obtained in said reading step by reading plural gradient patterns ~~outputted in said outputting step~~

and applies a smoothing process to the train of density data, thereby to create the correction table,
and the plural gradient patterns outputted in said outputting step are disposed in point symmetry
with respect to a center position of the image,

wherein the correction table is created by performing a the smoothing process
using some pieces of data whose number changes depending on the position of data in the
~~generated~~ determined train of density data, and

wherein the number of pieces of data used in the smoothing process is ~~selected~~
set on the basis of density reproduction characteristics.

21. (Previously Presented) The image forming method according to Claim
20, wherein the gradient pattern is composed of a plurality of density patches.

22. (Cancelled)